GREATER TORONTO AREA
URBAN STRUCTURE CONCEPTS STUDY

BACKGROUND REPORT NO. 2
MINIMAL GROWTH OPTION

Prepared for
The Greater Toronto Coordinating Committee

IBI GROUP
in association with
STEPHEN G. MCLAUGHLIN CONSULTANTS INC.

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Mr. E. M. Fleming
Chairman
Greater Toronto Coordinating Committee
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Dear Mr. Fleming:

Background Paper No. 2: Minimal Growth Option

This is the second in a series of background reports for the Greater Toronto Area Urban Structure Concepts Study. The background reports in the series are as follows:

1. Description of Urban Structure Concepts;
2. Minimal Growth Option;
3. Transportation Systems;
4. Water, Sewers and Solid Waste;
5. Greening/Environment;
6. Human Services;
7. Comparison of Urban Structure Concepts;
8. Public Attitudes Survey (to follow in Fall, 1990).

The overall study results are presented in a separate report titled Summary Report: Greater Toronto Area Urban Structure Concepts Study.

This paper reviews the objectives, policy levers and impacts of government intervention to retard or limit metropolitan growth in various countries, discusses these issues in the context of the GTA, as summarized in Section 4.5, and provides observations in the context of three basic questions pertaining to this issue. These observations are presented in Chapter 5.

This study breaks new ground by drawing together demand, supply, cost and effectiveness findings for three quite different future urban forms for the entire GTA including both "hard" and "soft" infrastructure. There is, therefore, little precedent against which to assess

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the results, some of which are perhaps unexpected or at least thought-provoking. The results are therefore preliminary, for discussion. If, as the findings are scrutinized and the comparison ratings are discussed, a consensus emerges regarding a preferred future urban structure for the GTA and/or a process for moving purposefully in that direction, the study will have served its purpose.

The opinions offered herein are those of the consultant and reflect to the extent possible comments received from the Urban Structure Subcommittee established for this study. They do not necessarily reflect the views of the Greater Toronto Coordinating Committee or the governments represented on the Committee.

We trust that the information and opinions offered will be helpful in the context of the study and subsequent planning activities and decisions.

Yours sincerely,

IBI GROUP

Neal A. Irwin
Managing Director

NAI:mr

Table of Contents

EXECUTIVE SUMMARY S.1

1. INTRODUCTION 1
   1.1 BACKGROUND 1
   1.2 PURPOSE AND SCOPE OF REPORT 2
   1.3 SOME BASIC QUESTIONS 2

2. URBAN GROWTH PROBLEMS, OPPORTUNITIES AND FACTORS 3
   2.1 PROBLEMS OF RAPID URBAN GROWTH 3
   2.2 OPPORTUNITIES PROVIDED BY URBAN GROWTH 4
   2.3 FACTORS AFFECTING URBAN GROWTH 5
   2.4 POLICY LEVERS AND IMPACTS 5

3. INTERNATIONAL EXPERIENCE 7
   3.1 DEVELOPED FREE MARKET COUNTRIES 7
   3.2 DEVELOPING COUNTRIES 8
   3.3 COMMUNIST COUNTRIES 8
   3.4 CONCLUSIONS REGARDING 9

4. GROWTH TRENDS AND OUTLOOK FOR THE GTA ... 10
   4.1 GROWTH TRENDS 10
   4.2 FACTORS AFFECTING GTA POPULATION GROWTH 11
   4.3 FACTORS AFFECTING EMPLOYMENT GROWTH .. 13
   4.4 DIVERTING GROWTH TO SATELLITE CENTRES .. 15
   4.5 SUSTAINABLE DEVELOPMENT 16
   4.6 SUMMARY OF MAJOR GTA GROWTH ISSUES ... 17
      Population Growth 17
      The Economy 18
      Sustainable Development 19

5. SOME OBSERVATIONS ON MINIMAL GROWTH FOR THE GTA 21
   5.1 IS THE MINIMAL GROWTH OPTION SEEN AS DESIRABLE FOR THE GTA? 21
   5.2 IF DESIRABLE, COULD THE GTA MINIMAL GROWTH OPTION BE ACHIEVED? 22
   5.3 WOULD ANY BENEFITS WHICH MIGHT RESULT FROM MORE INTERVENTION TO RETARD OR LIMIT THE GTA GROWTH RATE BE WORTH THE COSTS AND RISKS OF SUCH A POLICY? 23

List of Exhibits

		Follows Page No.
1.	PAST TRENDS AND GTCC PROJECTIONS OF GTA POPULATION AND EMPLOYMENT	9
2.	PAST FERTILITY RATES, PROVINCE OF ONTARIO, AND PROJECTED RATE ASSUMED IN GTCC POPULATION PROJECTIONS	11

Greater Toronto Area Urban Structure Concepts Study: Background Report No. 2: Minimal Growth Option: Executive Summary

BACKGROUND AND PURPOSE OF REPORT

The thrust of the Greater Toronto Area Urban Structure Concepts Study is to examine and compare three different urban structure concepts for the GTA. It is assumed that the overall population and employment of the GTA by the horizon year, 2021, would be similar under all three concepts at 6.02 million persons and 3.44 million jobs. The focus of the study is therefore on possible reallocation of growth and urban densities **within** the GTA rather than on possibly trying to change the overall growth rate of the GTA.

This background report, Minimal Growth Option, was commissioned after the study had begun, in order to address the alternative possibility of government intervention to divert growth away from the GTA (to other communities in Ontario), thereby providing some relief from the problems of rapid growth being experienced by the GTA and contributing to economic prosperity in other parts of the Province.

Chapter 2 discusses urban growth problems, opportunities and the forces and factors affecting growth. Chapter 3 provides a brief description of international experience in attempting to affect growth in some of the world's major cities, while Chapter 4 describes recent growth trends in the GTA and the relative importance of various factors contributing to this growth. Finally, Chapter 5 presents some observations on the minimal growth option as it might apply to the GTA.

URBAN GROWTH PROBLEMS, OPPORTUNITIES AND POLICY LEVERS

Recent literature on urban growth management identifies a number of objectives behind movements to retard or cap the growth of a rapidly growing area, including the following:

- quality of life;
- environment and natural resources;
- infrastructure limitations; and
- costs and cost allocations.

Municipal, state/provincial and national governments have used a variety of measures in attempting to control the overall growth or the distribution of growth in urban areas, including the following:

- land restrictions;
- incentives for growth elsewhere;
- development caps;
- price disincentives; and
- other regulations such as density limitations and zoning by-laws.

The literature suggests that such growth management measures may or may not have the desired impact on growth but often have other impacts such as:

- increases in the price of land and housing;
- discriminatory effects on young adults, minority populations and low/moderate income households;
- movement of head offices and other downtown commercial activities to other urban centres; and
- acceleration of the movement of industrial firms to rural areas or other urban centres.

INTERNATIONAL EXPERIENCE

The main conclusion drawn from a review of international experience is that rapid urbanization continues to occur on a global basis and the largest metropolitan centres in most countries continue to grow substantially, often at the expense of smaller urban centres, many of which have relatively stable populations and economic activity levels. The driving forces behind such growth tend to be in-migration from the rural hinterland to such major urban centres and/or immigration from other countries.

Examples, briefly described, include London, San Francisco, Sri Lanka and Moscow.

Exhibit 1 in the body of the report shows the projected growth trends, as derived by the Greater Toronto Coordinating Committee

GROWTH TRENDS AND OUTLOOK FOR THE GTA

(GTCC) and its consultants during the fall of 1989, and Exhibit 2 shows the past and projected fertility rates in the Province of Ontario, emphasizing the importance of the "baby boom" (born during the period 1946-1966) in generating the very high rates of household formation experienced during the past decade (and expected to continue to the end of the century) and the impact of the subsequent "baby bust" in producing smaller households with more adults and substantially greater per capita mobility and other infrastructure demands.

The point is made that, while natural fertility was a major component of GTA population growth in past decades, it will become steadily less significant, to the point that continuing GTA population growth will require increasing levels of in-migration if growth is to be sustained. Since other parts of Ontario and Canada are experiencing the same low population increase rates as in the GTA, immigration from abroad is increasingly the dominant factor in determining the rate of population growth in the GTA.

It is pointed out that the high levels of prosperity experienced in the GTA since 1940 can be attributed respectively to World War II and the postwar recovery period, rapid family formation and high immigration and birth rates which created the baby boom generation; and the GTA's increasingly favoured position as the largest metropolis in Canada which has benefitted from its proximity to U.S. markets, central location in Canada, favourable climate, excellent water supply and transportation linkages, and skilled labour force. Building on these factors, the GTA has become the prime financial centre of Canada and shows similar primacy in terms of manufacturing and service activities.

It would be unwise, however, to assume that continuing economic prosperity is inevitable for the GTA. Slumping automotive markets and increasing world competition, coupled with the Canada-U.S. Free Trade Agreement and other trading bloc changes, suggest that it would unwise to assume that the GTA's economic future will be "business as usual".

While the FTA will ease the flow of goods and services across the Canada-U.S. boundary, and is expected to provide increasing Canadian access to the larger U.S. market, the reverse is also true. The proximity of the GTA and its immediate hinterland to the U.S. industrial heartland may be a mixed blessing in this regard. Currently, the costs of land, labour, materials and services are significantly lower in Buffalo and the Niagara frontier region of upper

New York state than they are in adjacent parts of Ontario. It is possible, therefore, that businesses serving the GTA and southern Ontario may increasingly decide to locate in adjacent parts of upstate New York, trading off these lower land and production costs against slightly increased transportation costs to serve the Ontario market.

Possible government intervention to divert growth from the GTA to other parts of Ontario would quite possibly, therefore, have the effect of diverting the growth out of Ontario and into upstate New York or other parts of the United States.

SUSTAINABLE DEVELOPMENT

The report discusses the growing awareness of humankind that it must tailor its development rates to the capability of the natural environment to support such development and absorb its wastes without degradation, if the species is to survive in the longer term. Evidence of this problem, at the local level, includes increasing concerns about air, water and soil pollution and continuing urbanization of prime farmlands in and adjacent to the GTA. Broader problems include loss of topsoil, possible overharvesting of forests, lack of renewable energy resources and environmental degradation including acid precipitation, global warming, and loss of the stratospheric ozone layer.

It is pointed out that sustainable development at the GTA level would involve the application of improved technology and related planning and conservation measures to achieve substantially reduced per capita consumption of energy, land, water and other materials and natural resources, and correspondingly to reduce the per capita contribution to environmental pollution and degradation. Continuing growth of the GTA population could therefore be compatible with sustainable development, at least over a 30-40 year time horizon, if such measures were taken. Over that same time horizon, it is possible that the GTA population would stabilize, unless steps were taken to increase immigration levels into Canada, as noted earlier.

SOME OBSERVATIONS ON MINIMAL GROWTH FOR THE GTA

Three questions are raised and briefly discussed in this context, as follows:

1. is the minimal growth option for the GTA seen as desirable? The report notes that a recent public attitudes survey in Halton Region suggests that continuing growth is seen as acceptable or desirable, provided that the rate of growth is kept within reasonable bounds. The issues of environmental quality and sustainable development will become increasingly important, and a major policy lever affecting the rate of GTA population

growth will be international immigration to Canada, suggesting the need for a stronger future interaction among the three levels of government (municipal, provincial, federal) to achieve coordinated policies recognizing the federal jurisdiction over immigration;

2. if desirable, could the GTA minimal growth option be achieved? The report notes that, barring the types of extreme controls which have been applied in some totalitarian countries, it is very difficult for democratic governments to conceive and apply policies which will effectively cap the overall growth of a major metropolitan area. If the forces of population in-migration and economic momentum are strong for a particular metropolitan area, intervention to slow the rate of growth tends to have minimal impact on the growth rate but does produce substantial increases in land and housing prices. If sources of in-migration are drying up and/or economic momentum is faltering, such intervention may seriously affect the centre's growth rate and produce substantially greater retardation than originally intended;

3. would possible benefits from a GTA minimal growth strategy be worth the costs and risks of such a policy? The report suggests that the risks of such a policy, particularly at this time of changing trade patterns and fiscal instability, would create a real risk of throwing the GTA into a recession and diverting growth to adjacent areas in upstate New York or elsewhere in the U.S.

The most important policy reasons for government intervention to slow the overall GTA growth rate would likely be to provide time so that additional infrastructure could be installed to catch up with the deficiencies, provide an appropriate level of service to inhabitants, and maintain or improve the quality of the environment. All of these benefits could be achieved through an accelerated infrastructure improvement program and related planning policies affecting urban structure within the metropolitan area, as is analyzed under the Urban Structure Concepts Study. If infrastructure costs and deficiencies, due to rapid growth, are the main motivation for proposing steps to retard the overall growth rate, it seems likely that the alternative of providing improved infrastructure and related planning policies would be a better way of addressing the problem.

Greater Toronto Area Urban Structure Concepts Study: Background Report No. 2: Minimal Growth Option

1. INTRODUCTION

1.1 BACKGROUND

Faced with the problems of rapid urban growth a number of people have raised the issue of a "minimal growth" option for the Greater Toronto Area (GTA): is it not possible, through government policies, to retard GTA growth (either in whole or in some of its parts) as a means of addressing its infrastructure, social and environmental problems, to the extent that these are growth related? Some proponents suggest that a "lid" should be put on overall GTA growth. Others suggest that actions should be considered to slow down the overall rate of growth (to more "manageable" levels) or at least to manage growth more effectively so that it occurs in desired parts of the urban area (and not in others) with an appropriate urban structure and at desired densities.

The current GTA Urban Structure Study, of which this report is a part, is aimed at examining the infrastructure requirements/costs and related qualitative implications of several alternative urban structures for the GTA, as input to further work and decisions regarding possible growth management in the GTA. The focus in the current study (but not this report) is on possible reallocation of growth and urban densities **within** the GTA rather than on possibly trying to change the overall growth rate of the GTA. For this reason, and to make comparisons among them more valid, the three urban structure concepts under study are all based on the same overall population and employment levels for the GTA in 2011 and 2021.

It is quite possible, of course, that the different policies, investment levels and social/economic conditions and impacts of these concepts could result in different GTA populations and/or employment levels by 2011 or 2021. However, as noted in the companion Background Paper No 1: Description of Urban Structure Concepts, this would be very difficult to quantify and has not been attempted in the current study.

At the same time, the Greater Toronto Coordinating Committee recognized that the issue of possible government intervention to slow or limit the overall growth of the GTA has been raised as one possible way of dealing with burgeoning demand, high infrastructure costs and related social and environment impacts of rapid growth, and that the issue should be addressed.

1.2 PURPOSE AND SCOPE OF REPORT

This report was therefore commissioned to look beyond the possibility of managing growth to achieve urban structure/density and related changes **within** the GTA to the more fundamental issue of possible broader steps to limit the **overall** growth of the GTA.

Chapter 2 discusses urban growth problems, opportunities and the forces and factors affecting growth. Chapter 3 provides a brief description of international experience in attempting to affect growth in some of the world's major cities, while Chapter 4 describes recent growth trends in the GTA and the relative importance of various factors contributing to this growth. Finally, Chapter 5 presents some observations on the minimal growth option as it might apply to the GTA.

1.3 SOME BASIC QUESTIONS

The issue of possible government intervention to slow or limit the overall growth of an urban area raises several basic questions, as follows:

1. is it seen as desirable?;
2. could it be done?; and
3. if so, would any benefits outweigh the costs and risks?

Any attempt to address these questions raises a further set of basic issues including:

- housing costs and prices;
- economic impacts;
- environmental quality;
- equitable treatment of various social and economic groups; and
- jurisdictional barriers and level of political will.

This background report attempts to illustrate basic interactions among the above questions and issues with the aim of helping individual readers to reach their own conclusions regarding possible answers.

Numbered references cited in the text are listed at the end of the report.

2. URBAN GROWTH PROBLEMS, OPPORTUNITIES AND FACTORS

2.1 PROBLEMS OF RAPID URBAN GROWTH

Recent literature on urban growth management (1, 2) identifies a number of objectives behind movements to retard or cap the growth of a rapidly growing urban area. Major concerns regarding the impacts of rapid urban growth, as expressed in the literature, include the following:

- **quality of life:** including concerns expressed about traffic congestion and long commuting times, overcrowded schools, inadequate open space and loss of urban amenities in circumstances where infrastructure supply falls behind rapidly growing demand;

- **environment and natural resources:** including negative impacts if air, water and soil pollution is allowed to occur, and significant depletion of other natural resources such as agricultural land, other "green" areas and non-renewable energy sources;

- **infrastructure limitations:** including physical difficulties of providing sufficient transportation, sewer/water, solid waste disposal, energy, recreational and other "hard" and human services at a rate sufficient to keep up with the growing demand; and

- **costs and cost allocations:** difficulties in funding the required infrastructure and related investments, and concerns about inequities of cost allocation among various groups: e.g. original inhabitants and "newcomers"; owners and renters of housing; residential population and commercial enterprises; and users versus non-users of specific facilities and services.

Other reasons are sometimes cited, but those listed above appear to be raised most frequently.

2.2 OPPORTUNITIES PROVIDED BY URBAN GROWTH

As pointed out by Hans Blumenfeld in his essay "Alternative Solutions for Metropolitan Development" (3), the Industrial Revolution triggered migration from rural areas to metropolitan areas, where the advantages of industrial specialization, scale, diversity of jobs and labour and, above all, accessibility, provided economic and social opportunities largely unavailable in an agricultural rural economy. These opportunities, coupled with rapid increases in agricultural productivity during the past century, have reversed the pre-industrial ratio of 20% urban to 80% rural, such that most developed countries now have about 80% of their population living in urban areas. This trend continues strongly in third world countries (4), leading to extremely rapid growth of major metropolitan areas, in such countries with related problems of "shantytown" development, inadequate water/sewer services, overcrowded transportation and deficient human services.

Jane Jacobs, in "Cities and the Wealth of Nations" (5), suggests thatmany countries display the "elephant city" phenomenon, in which one or possibly two major metropolitan areas continue to grow and become dominant in the country while other urban areas are eclipsed and may become relatively stagnant. She attributes this trend, in both the developed and developing world, to the superior import-substituting initiatives of the dominant city, and the tendency of the national currency and related economic and regulatory factors to favour the more dynamic metropolitan area in its exporting capability, thereby increasing its advantage relative to the less dynamic centres. She suggests that a possible solution to this problem could be more diverse economic and fiscal policies within a country which would favour the trading capability of the less dynamic centres as well as the dominant one(s), thereby helping to equalize their growth rates and reducing the need for cross subsidization from the richer centre(s) to the less prosperous ones.

It is difficult to know whether or not this would have the stated effect, but it seems clear that people move to large urban areas predominantly because of the superior and more diversified economic and social opportunities which become accessible to them and which are seen to more than compensate for higher living costs and other problems which may be experienced in the metropolis. With some exceptions, the largest or "primate" city in most countries in 1900 is still the largest city in 1990. Canada, where Toronto supplanted Montreal, is one of the exceptions.

2.3 FACTORS AFFECTING URBAN GROWTH

While natural population increase (through the fertility of the existing population) is a factor in urban growth, migration from the hinterland and from other countries and cities has been a more significant contributor to the growth of dynamic urban centres in many cases.

The centripetal force of these advantages may, in some cases, be counterbalanced by the high costs of moving to, and living in, a large metropolitan area. This can be particularly true in times of rapid growth, during which the supply of housing and urban services may not be able to keep up with the growing demand, such that prices of housing and the costs of traffic congestion, etc., may dissuade potential newcomers from moving to the metropolis and more existing residents than usual may decide to move out, trading off reductions in economic and social opportunities for the reduced living costs of a smaller community. This centrifugal force, while tending to increase during times of rapid growth, may also be affected by demographic factors; for example, elderly people retiring from the labour force may decide to move to a lower cost community, but possibly one within relatively easy driving distance of the metropolis so that access to shopping, social and cultural opportunities is still available.

2.4 POLICY LEVERS AND IMPACTS

Municipal, state/provincial and national governments have used a variety of measures in attempting to control the overall growth or the distribution of growth in urban areas. Among the more frequently used approaches are the following:

- **land restrictions**: including the establishment of greenbelts, restrictions on providing serviced land and restrictions on the locations where development is permitted;

- **incentives for growth elsewhere**: including the establishment of "new towns" and satellite cities, often coupled with infrastructure improvements, attempts to establish industrial plants and other employment opportunities in such centres or in existing urban areas beyond the immediate hinterland of the metropolis;

- **development caps**: sometimes established in absolute terms or often related to sewer/water or transportation capacity;

- **price disincentives**: through development levies or local taxes designed to shift the costs of growth to those living in the rapidly growing areas and/or to newcomers moving to such areas (although such levies are often imposed by municipalities within a metropolitan area with the primary

objective of funding local infrastructure rather than slowing down local growth);

- **other regulations**: including density limitations, design and performance standards enforced through subdivision control and zoning ordinances.

There is a considerable literature on the application of such measures in various urban centres, but the record is less complete regarding their effectiveness in retarding or redirecting growth and the other impacts they have had. Among the latter, various studies (1, 2) describe the following types of impacts from "growth management" measures such as those listed above:

- increases in the price of land and housing;
- discriminatory effects on young adults, minority populations and low/moderate income households;
- movement of head offices and other downtown commercial activities to other urban centres; and
- acceleration of the movement of industrial firms to rural areas or other urban centres, thereby reducing job opportunities within the metropolis and possibly reducing average incomes.

There appears to be some agreement in the literature that growth management activity, particularly caps and limits on growth, can increase land and housing prices and have adverse effects on city and regional economies. There also appears to be agreement that the effectiveness and possible adverse impacts of growth management activities depend greatly on the specific urban area, its functional and economic circumstances, and the manner in which the measures were applied.

However, in general it would appear that limits on the amount of new developable land increase the cost of existing available land. This in turn most affects those persons or land uses least able to pay the higher price.

Illegal immigration and resulting unregistered population groups (which tend to gravitate to large metropolitan areas) also add to the difficulty of managing, and even measuring, population growth in such areas.

3. INTERNATIONAL EXPERIENCE

3.1 DEVELOPED FREE MARKET COUNTRIES

London, England is a good example of an "elephant city", which is vastly larger and more economically dynamic than any other metropolis in Britain. In the late 1930's and following the Second World War, the London planning authorities attempted to decentralize growth by establishing a five-mile-wide greenbelt around the existing urbanized area at the time (about 15 miles from the centre), and planning a number of "new towns" outside the greenbelt to accommodate continuing growth in new centres (14). The result was a substantial increase in the prices of both commercial and residential space within the greenbelt, as people and jobs continued to locate there, creating a supply/demand imbalance and therefore higher prices. At the same time, the expected growth in a number of the new towns did not materialize to the planned extent, while other older communities beyond the greenbelt continued to grow rapidly. It appears that the overall result has been continuing growth of the London region, possibly with higher prices for land, housing and office space than would otherwise have been the case, and with longer commuting distances to the centre for those living outside of the greenbelt.

Somewhat closer to home, the City of San Francisco enacted Proposition M in November 1986, which limited downtown office space approvals to a total of 475,000 sq.ft. annually and placed related restrictions on downtown office development. Since that time, the vacancy rate has dropped from about 18% to about 10%, and some observers state that rents have begun to rise. Since Proposition M was promulgated, a number of major companies have moved out of the downtown area to suburban locations or to other cities, allegedly because of the "anti business" attitude of the City and the extreme difficulty of obtaining approvals to construct new office space. For example, the Bank of America recently announced plans to build a $125 million office complex on a 100 acre site in a neighbouring municipality (Vacaville), in spite of the Bank's having been based in downtown San Francisco since 1904. Reasons cited for the move included land prices, affordable housing, an available labour supply, proximity to San Francisco and the cooperative attitude of the officials in Vacaville. The new complex will provide some 3,000 jobs, of which 2,000 will be lost from San Francisco. It might be argued that the overall outcome of this relocation is neutral (or bad or good depending on one's viewpoint) for the overall metropolitan area; it is unlikely, however, that the outcome was anticipated or desired by the

City of San Francisco, which initiated the policy that apparently helped to trigger the move.

3.2 DEVELOPING COUNTRIES

The "elephant city" phenomenon is particularly noticeable in many third world countries, including Indonesia, Korea, Taiwan, Ecuador, Panama, Peru, Chile, Argentina, Brazil and Sri Lanka.

A number of these countries have attempted to retard or limit the population growth in their major city or cities. For example, in 1970 the Governor of Jakarta declared the capital a "closed" city. In the following decade, however, migration to the Jakarta region from the rest of Indonesia was the highest ever recorded.

Similarly, in Mexico City, Seoul, Sao Paolo, Taipei, Bombay and Manila, continuing migration to the metropolis has proven to be largely beyond control.

A slightly different experience is quoted in Sri Lanka (4), where efforts by the government to upgrade the food, shelter and human services available in the hinterland appear to have stabilized the percentage of the population living in the metropolitan centre. It is thought that this may have been due, however, to the fact that Sri Lanka is largely agricultural and there is an absence of heavy industry in the metropolitan area to attract rural migrants. The paper quoting this experience, by Paul Vining Jr. in the April 1985 issue of **Scientific American**, notes that Sri Lanka is an example of the problem faced by governments if they attempt to limit the growth of their major metropolitan area: the very steps taken to retard urban growth are also likely to retard overall economic growth in the country. Since economic growth is seen as essential to providing a better life for the country's inhabitants, there is a strong tendency on the part of such governments to opt for growth and let the market work in terms of population distribution between the metropolis and its hinterland.

3.3 COMMUNIST COUNTRIES

Generally, communist countries (at least until recently) have exerted much more direct control over the residential locations and job opportunities provided to their citizens. This would suggest that such countries would be able to control the overall growth rate and size of their major urban areas.

The **Scientific American** article referred to earlier (4) suggests that such control has been effectively demonstrated in some third world communist countries. For example, Havana's share of the Cuban population in 1985 was almost exactly the same as in 1943. The government of Viet Nam reduced the population of Ho Chi Minh

City (formerly Saigon) from 4.5 million in 1975 to 3.1 million in 1982 accompanied, it is reported, by considerable loss of life among those forcibly removed from the city. Similarly, the lowest rate of urban population growth in China is found in the large cities of Beijing and Shanghai and the areas surrounding them.

On the other hand, experience in more developed communist countries seems to suggest that even the strong regulatory controls exerted by communist states may not be able to stem the growth of major metropolitan areas. For example, as pointed out by Hans Blumenfeld in his paper "The Modern Metropolis" (3) reprinted from the September 1965 of **Scientific American**, the government of the USSR in the 1930's set a planned limit of 5 million on the population of Moscow. By 1960, as reported in reference (14), the City's population was 6 million, nearly four times its 1921 population, and the population of the Moscow Region was over 9 million. The present population of the Moscow Region is about 13 million, including the area within the outer ring road, a circle with a radius of about 16 km.

3.4 CONCLUSIONS REGARDING INTERNATIONAL EXPERIENCE

The first conclusion we draw from the relevant literature, as briefly highlighted above, is that rapid urbanization continues to occur on a global basis and that the largest metropolitan centres in each country continue to grow substantially, often at the expense of smaller urban centres, many of which have relatively stable populations and economic activity levels. Except in the case of some third world communist countries and others, such as Sri Lanka, which remain largely agricultural, efforts by the national, regional and local governments to redistribute growth from the major metropolitan areas appear to have been largely ineffectual.

Where specific local actions are taken to set a cap on growth, there is a risk that major economic enterprises may decide to relocate to another urban centre (as noted in the San Francisco example above) thereby risking an overreaction and a reduction in economic opportunities in the affected area.

4. GROWTH TRENDS AND OUTLOOK FOR THE GTA

4.1 GROWTH TRENDS

Exhibit 1 !ustrates graphically past growth trends of GTA population and employment and projected future trends. The sources of the trend projections, from 1986 to 2021, are the reports prepared by Clayton Research Associates Limited and Hemson Consulting Ltd. for the Greater Toronto Coordinating Committee (GTCC) in October, 1989 (6, 7). The exhibit shows the "base case" or most probableprojection and the high and low projections. As noted in Background Report No. 1 of the current study, all three urban structure concepts under consideration in this study assume the same overall GTA population and employment totals in 2011 and 2021 as shown by the base case GTCC projections, and all three concepts assume the same population age distribution for the GTA as a whole in those years.

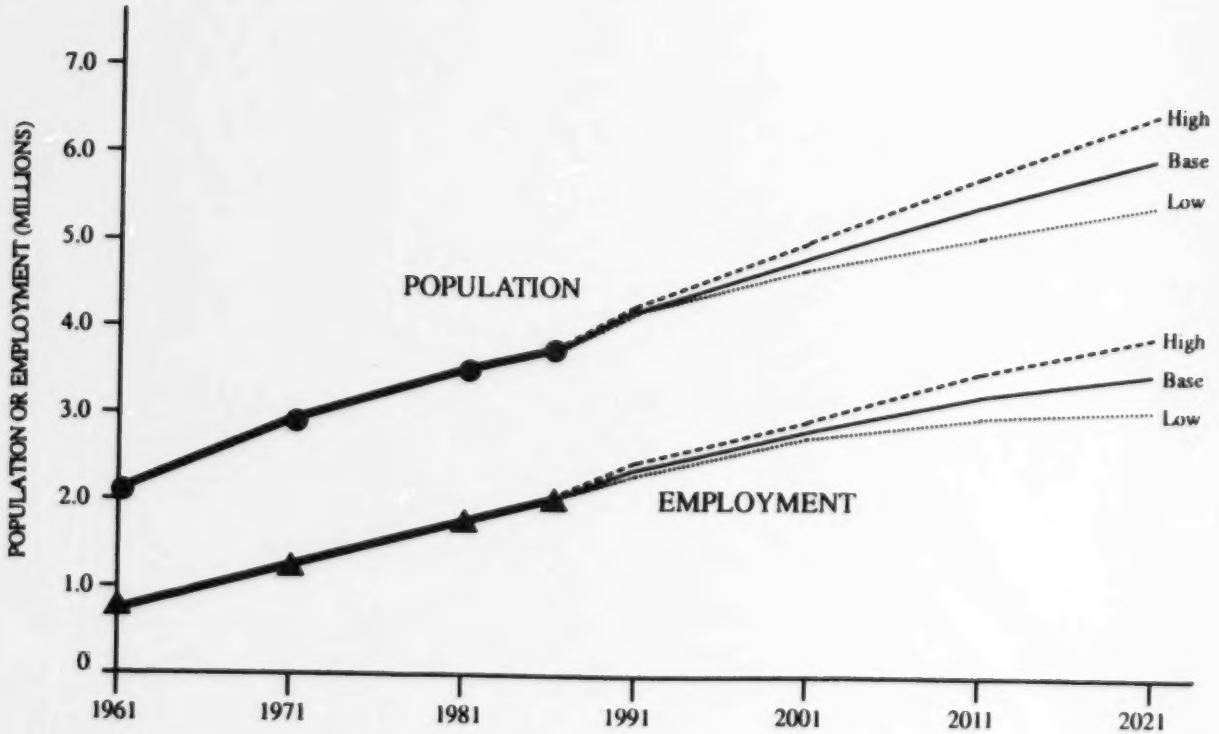
It can be seen that the GTA population grew from about 2.11 million people in 1961 to 3.73 million in 1986, an annual compound growth rate of about 2.31% over the 25 year period. The base case projection shows about 5.44 million in the GTA by 2011 and 6.02 million by 2021. This represents an annual compound growth rate of 1.52% for the 25 years from 1986 to 2011, and 1.38% for the 35 years from 1986 to 2021.

As can be seen, the projected rate of population increase is expected to decline in the future, relative to the past, and this trend towards slower growth is expected to become stronger toward the end of the projection period. For example, the annual compound growth rate of population between 2011 and 2021 in the base case projection is only 1.02%. This reflects the demographic fact that, while there is a continuing trend for people to live longer, fertility rates are substantially below those required to maintain the existing level of population and the surge of births due to family formation by the baby boom generation will taper off over the next 10-15 years, such that population levels would stabilize and start to decline in about 35-40 years unless there were increased levels of immigration. The major factors affecting future population levels in the long term would therefore appear to be federal immigration policy and interprovincial migration trends, as discussed further below.

Stated in absolute terms, the average annual growth rate for the GTA between 1961 and 1986 was about 65,000 persons per year.

EXHIBIT 1

PAST TRENDS AND GTCC PROJECTIONS OF GTA POPULATION AND EMPLOYMENT



SOURCES: References 6, 7 and 9.

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Under the base case projection, during the 25 years from 1986 to 2011, it is projected to be about 68,000 persons per year and, during the ten years from 2011 to 2021, about 58,000 persons per year. As illustrated in Exhibit 1, this reflects an initial increase in population growth (due to an increase in in-migration during 1986-91) followed by slowing in the rate of future population growth inherent in the base case GTCC projections, based on the demographic factors noted above. As shown in Exhibit 1, employment growth rate trends are similar to those for population, except that employment grew substantially more rapidly than population during the period from 1961 to 1986 reflecting the rapid entry of women into the out-of-home labour force during that period. (The employment/population ratio increased from about 40% in 1961 to about 56% in 1986.)While this trend will persist, it is expected to slow substantially as the number of women working outside of the home reaches saturation levels during the next two decades. If there were no other demographic or economic factors at work, the future employment trend thereafter would be expected to be quite similar to that for population.

There are a number of other factors at work, however. An important demographic factor is the "greying" of the population owing both to continuing increases in longevity and, more particularly, to the fact that the "leading edge" of the baby boom generation will reach age 65 by about 2011. This means that the proportion of retirees among the population will increase substantially during the last 10 or 15 years of the forecast period such that, all other things being equal, employment would be expected to grow more slowly than population between 2011 and 2021, a complete reversal of the trend experienced between 1961 and 1986.

Other economic and social factors at the provincial, national and international scale can be expected to influence future trends strongly, as discussed in the next section.

4.2 FACTORS AFFECTING GTA POPULATION GROWTH

Four sources of GTA population growth can be identified:

1. natural population increase (which is a function of fertility and mortality rates, as discussed briefly in the previous section);
2. net in-migration from the rest of Ontario;
3. net in-migration from the remainder of Canada; and
4. international immigration.

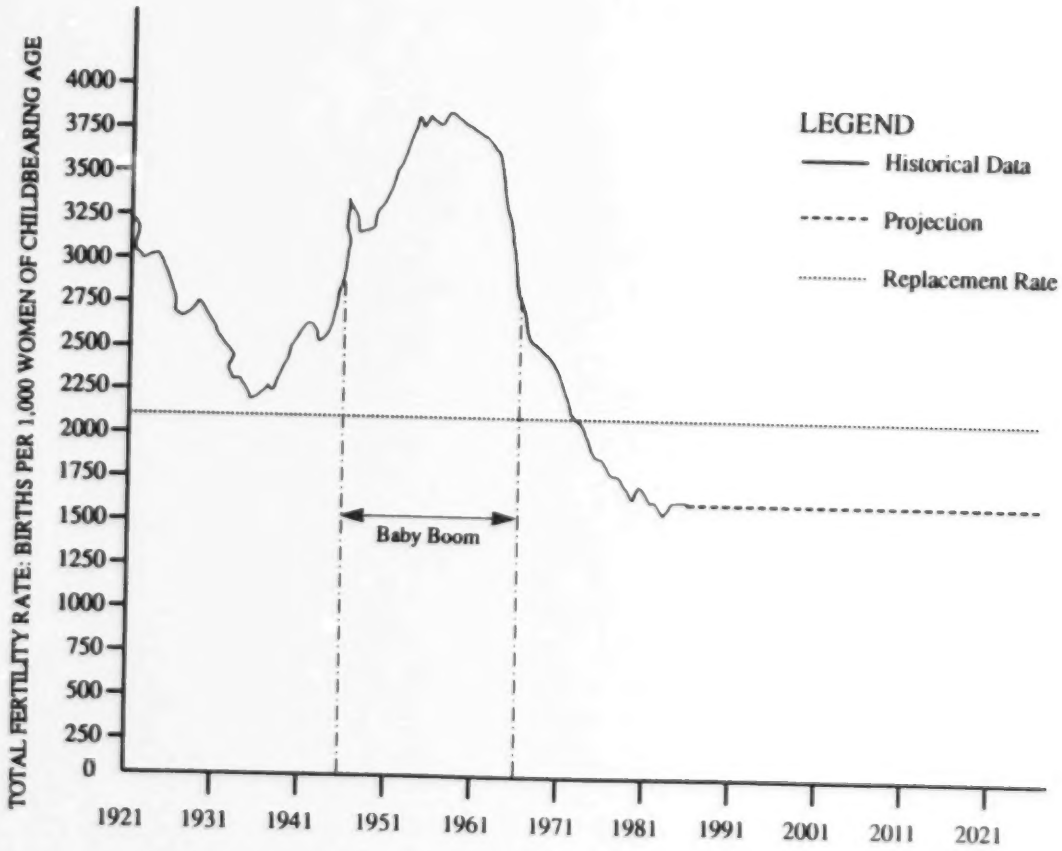
As discussed in the previous section, natural increase is expected to be a steadily declining source of growth, unless there is a sudden and significant increase in the fertility rate, which shows no signs of occurring. Exhibit 2 illustrates fluctuations in the Ontario fertility rate over the past several decades, and shows the dramatic increase in the mid-1940's (at the end ofWorld War II) which marked the beginning of the baby boom and the equally dramatic decline in the mid-1960's (as effective birth control came into general use) which marked its end. Demographic projections carried out for Canada by Statistics Canada (8) and for the GTA by the Metropolitan Toronto Planning Board (9) during the mid-1980's, indicate that, if there were no net migration, the population of Canada, and that of the GTA, would tend to stop growing during the next 20 or 30 years, with a subsequent decline in population levels if the low fertility rates persist.

For example, the Statistics Canada study shows that, with no net migration and assuming a total fertility rate of 1,700 births per 1,000 women (the present rate for Canada) the population of Canada would peak at about 27 million people, during the decade between 2011 and 2021, and would decline thereafter. A net annual immigration rate of about 290,000 per year would be necessary to produce a stable Canadian population of 30 million people. This is more than double the average net immigration rate to Canada during the past two decades. As shown in Exhibit 2, the GTCC projections are based on a future fertility rate of 1,636 births per 1,000 women; this was the Ontario rate in 1986 and is significantly less than the "breakeven" rate of about 2,100.

Net migration into the GTA will therefore play an increasingly important role in its population growth rate. During the period 1971-1986, it is estimated that approximately 53 percent of the GTA population growth came from natural increase and the remaining 47 percent was contributed by net in-migration from the rest of Ontario, the rest of Canada, and from international immigration. Since population in the rest of Ontario and the rest of Canada exhibits the same low fertility characteristics as that in the GTA, these regions are not expected to contribute strongly to GTA population growth during the next 20-40 years. Studies of interprovincial migration within Canada show that there have been major ebbs and flows, reflecting economic conditions: for example, there was a substantial net flow from Ontario to Alberta during the "energy boom" of the 1970's and early 1980's in Alberta; the 1982/83 recession and the subsequent surge in the Ontario economy saw a strong reversal, with net migration into Ontario from the other

EXHIBIT 2

PAST FERTILITY RATES, PROVINCE OF ONTARIO, AND PROJECTED RATE ASSUMED IN GTCC GTA POPULATION PROJECTIONS



SOURCES: References 8 and 9.

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provinces which, however, has slowed considerably during the past year.

Of the 54,000 persons per year by which the GTA population grew on average between 1971 and 1986, approximately 29,000 were from natural increase and 25,000 from net in-migration. During the 25 years from 1986 to 2011, the GTCC base case projection suggests that, of the average annual population increase of 68,000 persons per year in the GTA, approximately 26,000 will be from natural increase and 42,000 from net in-migration, including an assumed increase in net in-migration to 60,000 per year for the period 1986-91. The importance of net in-migration is obvious and becomes even more significant during the period 2011-2021. Of the average annual increase of 58,000 persons per year projected by the GTCC over that ten year period, about 21,000 is expected to come from natural increase and the remaining 37,000 from net in-migration, virtually all of which is likely to come from international immigration. This implies that the annual immigration rate into Canada, which has averaged about 140,000 persons per year during the past two decades, would have to increase to about 250,000-350,000 persons per year during the period 2011-2021, in order to maintain Canada's population growth rate at 1% per annum, as calculated in reference (8) by Statistics Canada.

It can be seen, therefore, that international immigration will likely become increasingly important as the major source of continuing population growth both in Canada and the GTA.

4.3 FACTORS AFFECTING EMPLOYMENT GROWTH

As noted in Background Paper No. 1 of this study the ratio of employment to population in the GTA in 1986 (referred to as the Activity Rate in that report) was about 55.7%. The GTCC base case projection shows this ratio increasing to 59.9% by 2011 (reflecting a continuing increase in the number of women working outside of the home) and then a drop to 57.1% by 2021 (reflecting the increased proportion of retirees in the population) as discussed earlier. While these demographic factors strongly influence the labour force and hence the employment market, there are obviously other economic factors which will influence the rate of increase of GTA employment. These can be divided into two broad categories:

1. employment growth to serve the growing needs of the GTA population (non-basic employment); and

2. employment growth to produce exports of goods and services from the GTA to other parts of Canada and to other countries (basic employment).

The first of these is largely a function of GTA population growth and per capita income levels. The analysis in reference (5) suggests that growth of the second type also depends on the extent to which import-substitution occurs; that is, the extent to which GTA inhabitants are able to create some of the goods and services they consume, rather than importing most of them from other regions or countries. The resulting economic diversity, innovation and job skills tend to influence, in turn, the GTA's ability to be competitive in national and world markets and therefore to export its goods and services to those areas.

The high levels of prosperity experienced in the GTA since 1940 can be attributed respectively to: the heavy manufacturing requirements of World War II and the postwar recovery period; the return of Canadian servicemen and the surge of postwar immigration, accompanied by rapid family formation and high birth rates which created the baby boom generation; and the GTA's increasingly favoured position as the largest metropolis in Canada which has benefited from its proximity to U.S. markets, central location in Canada, favourable climate, excellent water supply and transportation linkages, and skilled labour force. Building on these factors, the GTA has become the prime financial centre of Canada and shows similar primacy in terms of manufacturing and service activities.

It would be unwise, however, to assume that continuing economic prosperity is inevitable for the GTA. For example, automobiles and auto parts rank high among exports from southern Ontario and the GTA. The economies of both areas would therefore be vulnerable to potential downturns in the automotive market and competitive factors from the rest of the world which are largely beyond our control.

The Canada-U.S. Free Trade Agreement (FTA), as it comes into full force during the 1990's, also makes it unwise to assume that the GTA's economic future will be "business as usual". While the FTA will ease the flow of goods and services across the Canada-U.S. boundary, and is expected to provide increasing Canadian access to the larger U.S. market, the reverse is also true. The proximity of the GTA and its immediate hinterland to the U.S. industrial heartland may be a mixed blessing in this regard. Currently, the costs of land, labour, materials and services are significantly lower in Buffalo and the Niagara frontier region of upper New York state than they are in adjacent parts of Ontario. It is possible, therefore, that businesses serving the GTA and southern Ontario may increasingly decide to locate in adjacent parts of upstate New York, trading off these lower

land and production costs against slightly increased transportation costs to serve the Ontario market. If the FTA leads, as many expect, to increased north-south trade flows throughout North America, the GTA's favoured position as the major Canadian metropolis may be further weakened.

This is not to say that there are not enormous opportunities for the GTA and its inhabitants inherent in the FTA and changing world trade patterns. The point is, however, that major economic changes are taking place; Ontario and the GTA within it will have to anticipate and adapt to these changes if they are to remain economically competitive and continue to experience the prosperity of the past five decades.

4.4 DIVERTING GROWTH TO SATELLITE CENTRES

Some might argue that provincial intervention to slow the growth rate of the GTA (e.g. through restrictions on the availability of serviced land, increased taxes and related growth disincentives), coupled with incentives for growth in surrounding urban centres beyond the GTA such as Hamilton, Barrie and Peterborough (e.g. through industrial grants, improved infrastructure and related incentives) would relieve the growth pressures and costs in the GTA while retaining the economic benefits within the Ontario economy.

There are two basic risks inherent in such a policy. First, its effectiveness in attracting growth to surrounding centres is likely to be quite limited, based on the provincial experience of the 1970's in attempting to promote economic growth in eastern Ontario. (Recent success in attracting automotive assembly plants to centres such as Alliston and Cambridge is an exception to this experience, but future opportunities for attracting more automotive plants appear to be limited, owing to reduced market growth and increasing competition in the automotive industry.) Second, the production cost advantages of U.S. centres, in upstate New York and elsewhere, coupled with the reduced trade barriers resulting from the Free Trade Agreement, suggest that economic growth diverted from the GTA may be more likely to be diverted south of the border than to other parts of southern Ontario.

In short, given the uncertainties of a changing marketplace and the obvious economic success of the GTA as a major North American metropolis, there would appear to be a strong argument for assisting that metropolis to maintain and build on its economic success and economies of scale, rather than attempting to achieve a geographically more dispersed economy and thereby risk losing the growth from the Ontario and Canadian economies.

4.5 SUSTAINABLE DEVELOPMENT

It has been noted by many that the 1990's will be the decade of the environment and that, if humankind does not "clean up its act" and learn to tailor its development rates to the capability of the natural environment to support such development and absorb its wastes without degradation, the species will experience serious problems in the longer term. Evidence of this problem, at the local level, includes increasing concerns about air, water and soil pollution, continuing urbanization of prime farmlands in and adjacent to the GTA, and an increasing alienation from the natural world as access to the countryside becomes more and more difficult. At the provincial and national levels, loss of topsoil needed to sustain agriculture and food production is a long term concern, along with public uncertainty regarding whether Canada and its various provinces have achieved a sustainable level of forestry production, with a balance between forest harvesting and regeneration to produce a sustained yield. In the field of energy production, while Canada is blessed with renewable sources such as large hydroelectric production capability and a substantial forest biomass for fuel, we are also highly dependent on non-renewable hydrocarbon fossil fuels, a diminishing resource, and nuclear fission, a potent source of radioactive waste. In common with the rest of the world, we lack a sustainable energy source which is both environmentally benign and economically feasible, and are "making do" with available energy sources and technologies in the meantime.

At the global scale, there is increasing concern regarding the problems of acid precipitation, produced primarily by industrial and automotive emissions, and global warming, resulting from rapidly increased consumption of fossil fuels, deforestation and other human activities, including agriculture. Another major concern is the apparent depletion of the stratospheric ozone layer owing to human production of chlorofluorocarbons, which may be leading to increased ultraviolet radiation levels at the earth's surface with resulting threats to animal and plant life.

While scientific, economic and political controversy surrounds all of these environmental concerns, there is a growing consensus that they must be addressed sooner or later if humankind is to survive in the manner to which we are accustomed, and the sooner the better in the opinion of many. Continuing rapid population growth in the developing countries and high per capita consumption and pollution rates in the developed countries are matters of prime concern. As pointed out by Dr. Herman Daly of the World Bank and others (10, 11, 15) sustainable development does not necessarily mean sustainable growth. The distinction drawn is that growth means "bigger" while

development means "better". Under this thesis, the achievement of sustainable development on a global basis during the coming decades would require a reduction in population growth rates in the developing countries and a reduction in per capita consumption rates in the developed countries, leading to a better balance of per capita incomes and consumption, at levels which are sustainable in terms of natural resources and environmental quality.

If this philosophy were applied at the GTA level, an important result would be the application of improved technology and related planning and conservation measures to achieve substantially reduced per capita consumption of energy (for heating, transportation, industrial uses), land (through more compact urban development), water (through pricing and other conservation measures) and other materials and natural resources (through more efficient production, use and re-use). Reductions in per capita consumption, coupled with technological improvements, would also substantially reduce the per capita contribution to environmental pollution and degradation. Some of these matters, as they pertain to urban infrastructure (transportation, water/sewer systems, solid waste disposal, greening/environment) are being subjected to initial quantification, at the strategic level, for the three urban structure concepts developed as part of the current study. Others are beyond the scope of the present study and all will undoubtedly receive increasing attention as our society focuses on a better equilibrium between humankind and the global environment. The analytical tools required for a fuller understanding of the interrelationships affecting this equilibrium will require considerable development to this end.

At the national scale, a clear distinction should be made between the per capita and absolute consumption of energy, land and resources on the one hand, and the geographic location of the population on the other. There would be no overall benefit in this regard if the movement of people and activities from the GTA to other locations in Canada were to produce equal or higher per capita consumption rates or pollution and waste production rates at the new locations.

4.6 SUMMARY OF MAJOR GTA GROWTH ISSUES

Stemming from the above discussion, major issues affecting overall growth of the GTA can be summarized as follows:

Population Growth

- Natural increase will become steadily less important as a factor contributing to future population growth, owing to low fertility levels and the passing of the fertile years of the baby boom generation;

- if immigration from abroad remains at current levels, demographic projections for Canada (12) and (by implication) the GTA suggest that population levels would reach a peak during the next 35-40 years and would decline thereafter;

- a stable or declining population would, on the positive side, bring reduced pressures for new infrastructure in the GTA and an increased likelihood that sustainable development would be achieved; on the negative side would be the financial burden of maintaining an extensive infrastructure in the absence of a strongly growing tax base, and the challenge of achieving a prosperous economy with a stable or declining population. Our society would undoubtedly rise to these challenges if they occur, but current planning and actions will also have a profound impact. For example, the ability of our children or grandchildren to maintain a prosperous economy with a stable population would be greatly enhanced if the present generation finances infrastructure and other government expenditures from current revenues rather than passing along an even larger public debt than that which already exists;

- population growth in the GTA and its hinterland could be extended indefinitely if immigration rates were increased to necessary levels. Southern Ontario could become the "California" of the 21st century, attracting a continuing stream of migrants from other parts of Canada and the world until population densities, costs and environmental impacts might ultimately reduce its attractiveness to newcomers. This is a choice which can and will be made at the federal, provincial and municipal levels during the coming two or three decades, and it is appropriate to begin considering its implications now, at the strategic planning level.

The Economy

- An important issue affecting the growth of jobs and incomes, as well as population, is the extent to which local economic factors and planning policies may attract or repel potential newcomers to the GTA. If the economic and regulatory environment is such that skilled workers and entrepreneurs are attracted to the GTA, its economy will continue to develop. If not, the economy may grow more slowly or become relatively stagnant;

- similarly, if planning policies are such that a diversity of housing types is provided at reasonable prices, overall growth of the population, and the economy, will likely be greater than would be the case under policies which result in increased housing prices and possibly less diversity of housing types (e.g. rental/owned, suburban/central, detached/multiple);

- national and international economic developments, including: the increasingly severe impacts of Canada's national debt and steadily increasing annual interest payments; impacts of the Canada-U.S. Free Trade Agreement and other factors affecting international trade, inflation and the stability of major world currencies; and the continuing existence of Canada as a single country; are largely beyond the control of relevant municipal and provincial governments, yet may have a very significant impact on the GTA's continuing economic development.

Sustainable Development

- Decreases in per capita consumption rates of basic inputs (energy, land, water, other natural resources) and decreases in per capita pollution rates (air, water, soil, solid waste) represent important near term steps which can be taken in the GTA to move it towards sustainable development;

- urban structure concepts and local planning/economic policies in the GTA can play a significant role regarding some of these developments, as is being quantified at the strategic level by the current study;

- the issue of continuing population growth in the GTA mayalso be pertinent to the achievement of sustainable development, but is seen as a longer range issue (and one that may disappear as a result of demographic trends without the need for policy changes) which is considerably less important in the next 30 years than the issue of reduced per capita consumption and pollution levels;

- to some extent the existing planning/development policies and environmental regulations in the GTA, insofar as they may limit the rate at which serviced land becomes available for housing and other urbanization and therefore result in increased land and housing costs, are acting to retard GTA population growth rates. This is an important set of decisions by local governments, effectively trading off a

higher growth rate in order to maintain certain environmental standards and development controls, that is inherent in the existing situation; in this sense, and to the extent that some current planning policies in the GTA are attempting to achieve a degree of nodalization and higher densities, it is inaccurate to use the word "unconstrained" when referring to urban structure Concept 1 (spread city) which is being analyzed along with two more "constrained" concepts in the current study.

5. SOME OBSERVATIONS ON MINIMAL GROWTH FOR THE GTA

In summing up, we return to the three basic questions listed earlier in Chapter 1, regarding the minimal growth option for the GTA:

1. is it seen as desirable?;
2. could it be done?; and
3. would any benefits outweigh the costs and risks?

We address each of these briefly, in turn.

By the "minimal growth" option, in this context, we mean new or strengthened government policies aimed at retarding or limiting the overall growth of employment and/or population in the GTA.

5.1 IS THE MINIMAL GROWTH OPTION SEEN AS DESIRABLE FOR THE GTA?

This is, of course, a very important question and an answer to it would have to be forthcoming from the people and governments affected.

While not attempting to answer the question, we offer a number of observations drawn from the material summarized in this paper and from the broader literature and experience in this field:

- as shown in a recent public attitudes surveyin Halton Region, which has been experiencing relatively rapid urban growth in the south and, during the last half of the 1980's, some population growth constraints (due to sewer capacity restraints) in the more northerly area around Milton, people living in the south tended to favour continuing growth at rates slower than those experienced during the past ten years, while those living farther north tended to favour a somewhat higher rate of continuing growth;

- from the point of view of sustainable development, it would appear that actions to achieve reduced per capita consumption of natural resources and reduced per capita pollution levels are significantly more urgent and achievable than the issue of whether or not to reduce the rate of population and employment growth in any given area;

- existing planning and development policies and environmental regulations in the GTA, insofar as they may be reducing the rate at which new serviced land is made available for development, are probably contributing to higher housing costs and hence to a retarding of the

population and economic growth rate of the GTA at present, although the extent of this would be very difficult to estimate. The escalation of housing costs, whatever its causes, is a severe disbenefit to those wishing to enter the GTA housing market;

- demographic trends in the GTA and Canada (and most of the developed world) are such that population levels are growing at increasingly slower rates and are likely to peak during the next 35-40 years and then start declining, unless offset by increased immigration from other countries;

- national policies on international immigration to Canada are therefore likely to be the major determinant of the population growth rate in the GTA, particularly during the last half of the 30 year period under study.

5.2 IF DESIRABLE, COULD THE GTA MINIMAL GROWTH OPTION BE ACHIEVED?

- International experience, as discussed briefly in Chapter 3 of this paper, suggests that, barring the types of extreme controls which have been applied in some totalitarian countries, it is very difficult for democratic governments to conceive and apply policies which will effectively cap the overall growth of a major metropolitan area. This is particularly the case in situations where there remains a substantial rural population in the metropolitan hinterland or other parts of the country in which it is situated, or situations in which that country is receiving significant immigration from other countries;

- in situations where the surrounding countryside has a relatively low rural population (as is now the case in Canada and most developed countries) international immigration becomes the most important variable affecting continuing metropolitan growth, as already noted above regarding the GTA. Except through indirect influence on the national government, municipal and provincial governments do not have policy control over this variable. Federal policies affecting **demand** (e.g. immigration levels, interest and mortgage rates) can have an immediate impact while provincial and municipal policies which are more **supply** oriented (e.g. delivery of housing, infrastructure and other municipal services) often require substantial time to respond to significant changes in demand. The importance of an interrelationship among relevant policies at the three levels of government is apparent;

- Municipal and provincial governments are, of course, able to impose restraints on the availability of serviced land and other regulations which are likely to have the impact of producing increased land and housing costs and thereby exert a retarding influence on the overall growth rate, as discussed earlier in Chapters 2 and 4 and noted in Section 5.1 above. In times of rapid growth, such as have been experienced during the past six or seven years in the GTA, normal approval processes and environmental regulations are likely to lag somewhat behind demand, thereby inadvertently increasing the retarding effect. The evidence (e.g. very significant increases in housing prices) suggests that this occurred in the GTA during the period 1983-1989, but it would be very difficult to estimate the amount of population and economic growth which may have been "lost" as a result.

5.3 WOULD ANY BENEFITS WHICH MIGHT RESULT FROM MORE INTERVENTION TO RETARD OR LIMIT THE GTA GROWTH RATE BE WORTH THE COSTS AND RISKS OF SUCH A POLICY?

This again is a question that would have to be answered by the people and governments affected. Some observations based on the facts and discussion presented herein, are as follows:

- the most important policy reasons for government intervention to slow the overall GTA growth rate would likely be to provide time so that additional infrastructure could be installed to catch up with deficiencies, provide an appropriate level of service to inhabitants, and maintain or improve the quality of the environment. All of these benefits could be achieved through an accelerated infrastructure improvement program and related planning policies affecting urban structure (population/employment distribution and densities) within the metropolitan area, as is being analyzed under the current Urban Structure Concepts Study. If infrastructure costs and deficiencies, due to rapid growth, are the main motivation for proposing steps to retard the overall growth rate, it seems likely that the alternative of providing improved infrastructure and related planning policies would be a better way of addressing the problem;

- the above observation is offered in the context of substantial evidence (some of it summarized in this paper) that government intervention to retard overall metropolitan growth rates tends to drive up land and housing prices, may even then be relatively ineffectual if growth pressures are strong enough and, if the metropolitan economy is not

particularly strong, may result in significant economic loss to the metropolis. Owing to recent and ongoing changes in world trading patterns, high levels of public and private sector debt in Canada and many other countries, and related fiscal, economic and political problems in Canada and abroad, this would appear to be a particularly inauspicious time to contemplate government intervention aimed specifically at slowing the rate of growth of the GTA. While the intent of such a policy might be to channel growth to surrounding municipalities such as Hamilton, Cambridge, Barrie, Peterborough or Kingston, there is no guarantee that the growth would not be diverted to U.S. centres such as Buffalo, Lewiston, Charlotte and Atlanta;

- In summary, several potential costs and risks of intervention to slow overall GTA growth should be noted:
  - land and housing prices may be further escalated, with resulting economic and social costs felt more strongly by less affluent sectors of the population;
  - the intervention may be relatively ineffective in slowing growth, even though housing prices are driven up, because of strong external growth pressures;
  - if growth pressures in terms of in-migration and economic growth opportunities are weakening, the intervention may trigger a local recession and a period of decline or stagnation in the GTA, with growth possibly diverted to upstate New York and other U.S. centres able to serve the Southern Ontario market competitively because of lower U.S. costs for land, labour, food, fuel and most manufactured products;
  - the balance between population and economic growth may be disturbed such that economic growth is curtailed while population growth continues, resulting in lower per capita incomes and a reduced standard of living.

In short, intervention to curtail overall growth would be a risky undertaking, with large associated uncertainties.

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